

REFERENCES

- Beale, E.M.L., 1960, Confidence regions in non-linear estimation: *Journal of the Royal Statistical Society, series B*, v. 22, no. 1, p. 41-76.
- Beven, K., and Binley, A., 1992, The future of distributed models: Model calibration and uncertainty prediction: *Hydrological Processes*, v. 6, p. 279-298.
- Brooks, R. J., Lerner, D. N., and Tobias, A. M., 1994, Determining the range of predictions of a groundwater model which arises from alternative calibrations: *Water Resources Research*, v. 30, no. 11, p. 2993-3000.
- Christensen, S., and Cooley, R.L., 1996, Simultaneous confidence intervals for a steady-state leaky aquifer groundwater flow model: In *Calibration and Reliability in Groundwater Modelling*, ed. by K. Kovar and P. van der Heide, IAHS pub. no. 237, p. 561-569.
- Christensen, S., and Cooley, R.L., 1999a, Evaluation of confidence intervals for a steady-state leaky aquifer model: *Advances in Water Resources*, v. 22, no. 8, p. 807-817.
- Christensen, S., and Cooley, R.L., 1999b, Evaluation of prediction intervals for expressing uncertainties in groundwater flow model predictions: *Water Resources Research*, v. 35, no. 9, p. 2627-2639.
- Christensen, S., and Cooley, R.L., 2003, Experiences gained in testing a theory for modelling groundwater flow in heterogeneous media: In *Calibration and Reliability in Groundwater Modelling: A Few Steps Closer to Reality*, edited by K. Kovar and Z. Hrkál, IAHS pub. no. 277, p. 22-27.
- Christensen, S., Rasmussen, K.R., and Møller, K., 1998, Prediction of regional ground-water flow to streams: *Ground Water*, v. 36, no. 2, p. 351-360.
- Clarke, G.P.Y., 1987, Approximate confidence limits for a parameter function in nonlinear regression: *Journal of the American Statistical Association*, v. 82, no. 397, p. 221-230.
- Cooley, R.L., 1993a, Exact Scheffé-type confidence interval for output from groundwater flow models, 1, Use of hydrogeologic information: *Water Resources Research*, v. 29, no. 1, p. 17-33.
- Cooley, R.L., 1993b, Exact Scheffé-type confidence intervals for output from groundwater flow models, 2, Combined use of hydrogeologic information and calibration data: *Water Resources Research*, v. 29, no. 1, p. 35-50.
- Cooley, R.L., 1993c, Regression modeling of ground-water flow. Supplement 1—modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems: *U.S. Geological Survey Techniques of Water Resources Investigations*, book 3, chap. B4, supp. 1, 8 p.
- Cooley, R.L., 1997, Confidence intervals for ground-water models using linearization, likelihood, and bootstrap methods: *Ground Water*, v. 35, no. 5, p. 869-880.
- Cooley, R.L., 1999, Practical Scheffé-type credibility intervals for variables of a groundwater model: *Water Resources Research*, v. 35, no. 1, p. 113-126.

- Cooley, R.L., 2004, A theory for modeling ground-water flow in heterogeneous media: U.S. Geological Survey Professional Paper 1679, 220 p.
- Cooley, R.L., and Hill, M.C., 1992, A comparison of three Newton-like nonlinear least-squares methods for estimating parameters of ground-water flow models, *in* Russell, T.F., Ewing, R.E., Brebbia, C.A., Gray, W.G., and Pinder, G.F.eds., *Computational Methods in Water Resources IX*, v. 1, , Numerical methods in water resources – Proceedings of the International Conference on Computational Methods in Water Resources, 9th, Denver, Colorado, 1992: Oxford, U. K., Computational Mechanics Publications, p. 379-386.
- Cooley, R.L., and Naff, R.L., 1990, Regression modeling of ground-water flow: U.S. Geological Survey Techniques of Water-Resources Investigations, book 3, chap. B4, 232 p.
- Cooley, R.L., and Vecchia, A.V., 1987, Calculation of nonlinear confidence and prediction intervals for ground-water flow models: *Water Resources Bulletin*, v. 23, no. 4, p. 581-599.
- Draper, N.R., and Smith, Harry, 1998, *Applied regression analysis* (3rd ed.): New York, John Wiley, 706 p.
- Donaldson, J.R., and Schnabel, R.B., 1987, Computational experience with confidence regions and confidence intervals for nonlinear least squares: *Technometrics*, v. 29, no. 1, p. 67-82.
- Graybill, F. A., 1976, *Theory and application of the linear model*: Pacific Grove, Calif., Wadsworth and Brooks/Cole, 704 p.
- Guttman, Irwin, and Meeter, D. A., 1965, On Beale's measures of non-linearity: *Technometrics*, v. 7, no. 4, p. 623-637.
- Hamilton, D., and Wiens, D., 1987, Correction factors for F ratios in nonlinear regression: *Biometrika*, v. 74, no. 2, p. 423-425.
- Harbaugh, A.W., Banta, E.R, Hill, M.C., and McDonald, M.G., 2000, MODFLOW-2000, the U.S. Geological Survey modular ground-water model – user guide to modularization concepts and the ground-water flow process: U.S. Geological Survey Open-File Report 00-92, 121 p.
- Hill, M.C., 1989, Analysis of accuracy of approximate, simultaneous, nonlinear confidence intervals on hydraulic heads in analytical and numerical test cases: *Water Resources Research*, v. 25, no. 21, p. 177-190.
- Hill, M.C., 1992, A computer program (MODFLOWP) for estimating parameters of a transient, three-dimensional ground-water flow model using nonlinear regression: U.S. Geological Survey Open-File Report 91-484, 358 p.
- Hill, M.C., 1994, Five computer programs for testing weighted residuals and calculating linear confidence and prediction intervals on results from the ground-water parameter-estimation computer program MODFLOWP: U.S. Geological Survey Open-File Report 93-481, 81 p.
- Hill, M.C., Banta, E.R, Harbaugh, A.W., and Anderman, E.R., 2000, MODFLOW-2000, the U.S. Geological Survey modular ground-water model – user guide to the observation,

- sensitivity, and parameter-estimation processes and three post-processing programs: U.S. Geological Survey Open-File Report 00-184, 209 p.
- Kitanidis, P.K., 1997, Introduction to geostatistics: New York, Cambridge University, 249 p.
- Linssen, H.N., 1975, Nonlinearity measures – A case study: *Statistica Neerlandica*, v. 29, p. 93-99.
- Press, W.H., Flannery, B.P., Teukolsky, S.A., and Vetterling, W.T., 1986, Numerical Recipes: Cambridge, Mass., Cambridge University, 818 p.
- Seber, G.A.F., and Wild, C.J., 1989, Nonlinear regression: John Wiley, New York, 768 p.
- Shapiro, S.S., and Francia, R.S., 1972, An approximate analysis of variance test for normality: *Journal of the American Statistical Association*, v. 67, no. 337, p. 215-216.
- Theil, H., 1963, On the use of incomplete prior information in regression analysis: *American Statistical Association Journal*, v. 58, no. 302, p. 401-414.
- Vecchia, A.V., and Cooley, R.L., 1987, Simultaneous confidence and prediction intervals for nonlinear regression models with application to a groundwater flow model: *Water Resources Research*, v. 23, no. 7, p. 1237-1250.